

ORDERED ARRAY OF MAGNETIZED NANORODS AND ASSOCIATED METHODS

Abstract Of The Disclosure

- 5 An ordered array of magnetized nanorods includes a plurality of
metallic nanorods generally cylindrical in shape and including a nickel portion
coated with a positively charged polyelectrolyte and a gold portion coated with
an alkanethiolate; and a layer of a hardened polymer wherein each individual
nanorod of the plurality is held by having said gold portion embedded therein
10 so that the nickel portion extends approximately perpendicularly away from
the layer of hardened polymer, and wherein said plurality of metallic nanorods
is ordered in the array by having substantially all individual nanorods of the
plurality of nanorods oriented generally parallel to each other.